

REMARKS

Entry of the foregoing and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.111 and in light of the remarks which follow, are respectfully requested.

By the above amendments, claims 2 and 4-9 have been canceled without prejudice or disclaimer. Claim 1 has been amended for clarification purposes by replacing the phrase "a surface-treated coloring agent" with "a pigment subjected to a surface treatment." Support for this amendment can be found in the specification at least at the paragraph bridging pages 15 and 16. Claim 3 has been amended for clarification purposes by deleting the phrase "and having an average particle diameter of from 0.01 to 1.0 μm ," and the deleted subject matter is set forth in new dependent claim 11. New dependent claim 10 recites that "the surface treatment is a rosin treatment or a polymer treatment." Support for such claim can be found in the specification at least at pages 18-24.

In the Official Action, claims 1-3 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0225188 (*Horie*). Without addressing the propriety of this rejection, it is noted that the foreign priority claim has been perfected by submission of a verified English translation of the priority application, i.e., Japanese Application No. 2002-190495 filed June 28, 2002. In light of the fact that the June 28, 2002 filing date of the priority application predates the May 27, 2003 §102(e) date of *Horie*, *Horie* does not qualify as §102(e) prior art with respect to the present application. Accordingly, for at least this reason, withdrawal of the §102(e) rejection is respectfully requested.

Claims 1 and 3 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0077383 (*Takao et al*).¹ Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 1 is directed to an oil based ink composition for inkjet printer comprising colored resin particles obtained by dispersion polymerization of a monofunctional polymerizable monomer (A) and a monofunctional polymerizable monomer (B) copolymerizable with the monomer (A) having a substituent containing a silicon atom and/or a fluorine atom with coloring component fine particles comprising a pigment subjected to a surface treatment, which are dispersed in a non-aqueous solvent having a dielectric constant of from 1.5 to 20 and a surface tension of from 15 to 60 mN/m at 25 °C, as seed particles, in the presence of a dispersion stabilizer (P) soluble in the non-aqueous solvent and a polymerization initiator.

Takao et al relates to an ink for ink jet ink printers which comprises an organic solvent and a pigment dispersed in the organic solvent (page 1, paragraph 0001).

Takao et al does not disclose each feature recited in claim 1, and as such fails to constitute an anticipation of such claim. For example, *Takao et al* does not disclose colored resin particles obtained by dispersion polymerization of, *inter alia*, coloring component fine particles comprising a pigment subjected to a surface treatment, as recited in claim 1. That is, *Takao et al* has no disclosure of the claimed coloring component fine particles comprising a pigment subjected to a surface treatment. In this regard, the Official Action at page 4 acknowledges *Takao et al*'s failure to disclose the claimed surface treatment.

As discussed in the instant specification at pages 18-24, the surface treatment of the pigment can be selected from treatments including, for example, a rosin treatment, a polymer

¹ The application corresponding to the '383 publication issued as U.S. Patent No. 6,900,253 on May 31, 2005.

treatment, a grafting treatment and a plasma treatment. In view of such disclosure, Applicants respectfully submit that the surface treatment of the pigment results in a physical change of the surface of the pigment. That is, the surface-treated pigment is physically distinguishable from a non-surface-treated pigment. Moreover, by employing the surface-treated pigment in the claimed dispersion polymerization, colored resin particles can be obtained having improved ink characteristics such as, for example, clear printed image quality, improved scratch resistance and good long-term dispersibility (specification at page 75).

In light of the fact that *Takao et al* fails to disclose a pigment subjected to a surface treatment as is presently claimed, it is apparent that the fine particles disclosed by *Takao et al* do not fairly constitute an anticipation of the claimed colored resin particles. For at least this reason, withdrawal of the above §102(b) rejection is respectfully requested.

Claims 1-3 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,197,847 (*Kato et al*) in view of either European Patent Document No. 1 205 815 (*EP '815*) or U.S. Patent No. 4,360,580 (*Tsubuko et al*). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Kato et al relates to an oil-based ink for preparing a printing plate by an ink jet process (col. 1, lines 7 and 8).

Kato et al does not disclose or suggest each feature recited in claim 1. For example, as acknowledged at page 6 of the Official Action, *Kato et al* does not disclose or suggest colored resin particles obtained by dispersion polymerization of, *inter alia*, coloring component fine particles comprising a pigment subjected to a surface treatment, as recited in claim 1.

EP '815 relates to a liquid ink including colorant particles surface-treated with a polymer comprising units derived from at least a nitrogen-containing polymerizable monomer (col. 1, lines 7-11).

EP '815 fails to cure the above-described deficiencies of *Kato et al.* In this regard, the Patent Office has asserted that *EP '815* discloses various beneficial effects achievable by surface-treating a colorant with a nitrogen-containing polymer. However, *EP '815* provides no mention or suggestion that such beneficial effects would be achieved if the treated surface of the colorant was coated with an additional coating by polymerization dispersion. But this is the modification that the Patent Office has asserted as being obvious. It is respectfully but strenuously submitted that *EP '815* provides no motivation for or suggestion of using the treated surface as an "inner" surface of the particle, in the manner suggested by the Patent Office. Quite to the contrary, it would appear that by covering the treated surface, the modification suggested by the Patent Office would have hindered or prevented achieving the beneficial effects of the surface treatment disclosed by *EP '815*.

Tsubuko et al relates to a liquid developer for use in electrostatic photography which developer is of the type composed of a toner dispersed in a carrier liquid (col. 1, lines 10-13). *Tsubuko et al* discloses a coloring agent consisting essentially of fine particles of pigment coated with a "resin B", wherein the resin B is substantially insoluble in the carrier liquid of the liquid developer (col. 2, lines 9-16). *Tsubuko et al* further discloses that because of the substantial insolubility of the resin B in the carrier liquid, the liquid developer possesses improved storage stability (col. 2, lines 49-55).

Like *EP '815*, *Tsubuko et al* fails to cure the above-described deficiencies of *Kato et al.* As discussed above, *Tsubuko et al* discloses the use of the resin B coating to minimize solubility in the carrier liquid of the liquid developer for use in electrostatic photography.

However, *Kato et al* does not even relate to a liquid developer for use in electrostatic photography, but rather relates to an ink for preparing a printing plate by an ink jet process.

Moreover, the Patent Office has asserted that *Tsubuko et al* discloses various advantages of employing the resin B coating on the fine particles (Official Action at page 6). However, *Tsubuko et al* provides no mention or suggestion that such advantages would be realized if the resin B coating was coated with an additional coating by polymerization dispersion. Quite to the contrary, it would appear that by covering the resin B coating, the modification suggested by the Patent Office would have hindered or prevented achieving the beneficial effects of the resin B coating disclosed by *Tsukubo et al*.

In view of the above, it is apparent that one of ordinary skill in the art would not have been motivated to combine *Kato et al* with either *EP '815* or *Tsubuko et al*. Accordingly, for at least the above reasons, withdrawal of the §103(a) rejection is respectfully requested.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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